

**NSB Statement
On
Competition, Recompetition, and Renewal of NSF Awards**

The commitment to merit-reviewed competition within the context of NSF's merit review criteria is a hallmark of the NSF grant/award making process. The principle of requiring expiring awards to be recompeted follows from the conviction that peer-reviewed competition and recompetition is the process most likely to assure the best use of NSF funds for supporting research and education.

In 1997, the Board approved a Statement on Competition, Recompetition, and Renewal of NSF Awards (NSB-97-216) based on discussions and recommendations from an NSB Task Force on Recompetition, the Committee on Programs and Plans (CPP), a CPP-NSF subcommittee, and the Education and Human Resources Committee. In the following years, questions arose regarding the implementation of the 1997 Statement, and in 2006 CPP and the Board began an assessment of the implementation of the 1997 Statement. The Board is issuing this amended Statement, incorporating the findings of that assessment.

NSF awards range in size and complexity from individual investigator and small group awards; to large groups; centers; and to construction, operation, and research use of national and international facilities. This paper outlines the major issues associated with competition, recompetition, and renewal in the context of the special characteristics of the several categories of NSF awards:

- 1) Individual investigators and small groups;
- 2) Large Groups;
- 3) Centers;
- 4) Construction, operation, and research use of facilities for national and international user communities;

1. Individual Investigator and Small Group Awards:

These represent, by number, the great majority of NSF awards. They are made typically for 3 years, in response to peer review assessments of proposals. Renewals require peer review of proposals and survival in the competition with every other proposal submitted for funding in the same research area. No special additional measures are required to assure competition. The key criteria are always those specified by NSF and approved by the Board (reference the recent *Grand Proposal Guide*); management issues, per se, do not play a significant role.

2. Large Group Awards:

Some large university groups receive continued funding over extended periods. It is important to periodically reassess these Large Group Awards (LGAs) to determine in which areas continuation may be needed and appropriate. One special issue in evaluating LGA renewal proposals is the need to determine whether individual members continue to merit support. Another is that several subgroups individually merit funding. There is a concern that the group can buffer individual members and subgroups from competition unless NSF staff make Special review arrangements. This raises concerns about management within the LGA, and NSF should continue to pay attention to these issues.

3. Centers:

Many, but not all, center awards are limited to a maximum duration – typically on the order of 10 years, after which continued funding requires success in open, merit-reviewed competition. This is a good practice as it requires existing centers to “re-invent” themselves and compete for scarce resources; this practice should be applied more uniformly across all centers, as they were re-defined by the Board in (NSB-05-166), December 1, 2005. The initially funded proposals are selected on the basis of merit review, and progress is monitored periodically to determine subsequent funding levels. Some center programs do not have explicit recompetition requirements. Among those that do, there is wide variation as to whether, and the extent to which, past guidelines be established for the review and renewal of centers, with the aim of making the procedures as uniform and explicit as practicable. The procedures should also address the issue of phase-down of support for centers which are not, in fact, renewed.

4. Major Facility Awards

The complexity of these awards and the associated community requirements, necessitate special considerations in implementing the NSF goal of full competition/recompetition. In all cases, it is essential that NSF determine periodically whether a particular facility still represents the best use of NSF funds. Upon the completion of the construction of a major facility, and following an appropriate time period to bring the facility to sustainable operations,[†] full and open competition for the facility operations should be required. This Board policy should be made clear to the awardee organization and the community not only at the beginning of the construction award, but also at the beginning of the initial operations award so that the awardee institution and the community are notified well in advance of NSF’s intention to re-compete the operations award. This will ensure that the best interests of the community continue to be well served.

a) Construction Awards:

These awards result from and require demonstrated community consensus that the facility is needed for progress in an important, high priority area of research. The decision to support a specific initial construction project or upgrade is based on the results of outside assessments of the scientific and technical merits of a detailed proposal, and proposed awards require NSB review and approval. Only in rare cases has NSF organized competitions to determine the awardee. Rather, the organization that developed the facility concept and secured community interest in its construction submits a unique proposal, and that organization assumes responsibility for construction, often subcontracting out all or part of the work. The subcontracts are often awarded on the basis of a competitive bid process. Through cooperative agreements NSF and the awardee normally share responsibility for monitoring progress through semiannual (or more frequent) technical reviews. The Board believes these procedures to be sound, but the increasing complexity of many construction projects dictates increasing attention to oversight. NSF should retain the option to re-compete construction awards in the face of poor performance by the awardee.

b) Operation Awards:

There are organizational and management issues involved with the operation of large facilities, and hence NSF finds it necessary to conduct management reviews (as distinct from science reviews) at regular intervals and to provide feedback to the managing organizations, which also conduct such reviews. It is important that NSF provide proper guidance on how best to conduct these management reviews, along with defined review criteria and review forms. In particular, supplemental criteria addressing

[†] The Final Design Review will include the review and approval of an Operating and Maintenance Plan that will define the most likely period required for sustainable operation.

management issues should be used. Further, the user community should be periodically surveyed about the level of satisfaction with the services the performing organization is providing. This can often be as important as good management, and the two such reviews can provide a more holistic view of the awardee.

Even in cases where the management has been explicitly and rigorously reviewed and found to be effective, the benefits of competition may outweigh any short-term disadvantages of recompetition. NSF must determine periodically whether there is a better approach to managing the facility. The issue of recompetition should be explicitly addressed as a regular part of the decision process for every such award.

c) Support and Research Staff at Major Facilities

Major facility awards often include funding to support research by facility staff. Organizations such as NCAR, NRAO, NOAO, etc., as well as a number of university-based facilities, employ substantial numbers of scientists and engineers. To the extent that these staff are essential to the operation and effective research use of the facility, their support should be reviewed in the context of the management assessments discussed above. The distribution of staff efforts between user services and research should be examined periodically.

Allocations of resources for staff research should be governed by rigorous merit review based on the standard NSF criteria. Many NSF programs impose additional supplemental criteria and these should be applied uniformly to external and in-house users of the facility, whether the funding is provided by the facility or directly by NSF. In the case of in-house users, NSF may wish to delegate responsibility for conducting this merit review to facility management, while retaining responsibility for oversight. The Board recognizes that the mechanisms best suited to implement these principles may vary from facility to facility.

d) Special Rules for FFRDCs

For those NSF facilities that have the status of “Federally Funded Research and Development Centers” (FFRDCs), including several facilities listed above, special requirements apply to recompetition and renewal. These are spelled out in the *Federal Acquisition Regulations*, Part 35. Specific requirements for reviews include examination of the sponsor’s continuing technical needs, consideration of alternative sources to meet those needs, assessment of the efficiency and effectiveness of the FFRDC in meeting the sponsor’s needs and adequacy of the FFRDC management, and determination that the criteria under which the FFRDC was established continue to be satisfied. Such reviews must take place at least once every 5 years. Nonetheless, full and open competition is almost always in the community’s best interest, and, as such, should be periodically held to ascertain whether the FFRDC awardee is the best positioned awardee to carry out a community’s future plans, provide best user services, ensure best management practices, etc.